# **Report:**

# **New Construction Standards Based on Compatibility**

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#### Introduction

The review and approval of new construction in historic districts is an important component of historic district standards as new buildings are permanent changes in the district. District standards provide varying degrees of guidance for new construction, particularly for buildings that do not use the historic design vocabulary of the historic district. This report summarizes my study of this topic during 2014 and 2015 and explains what compatible new construction could be in contrast to comparable and replicative design.

I first spoke about this topic to a group of AIA members in November 2014. I revised my presentation and reported on my work to the Preservation Board in January 2015 and also spoke to a group gathered by the Landmarks Association that month. I revived my study in the fall of 2015 and worked with a group of people interested in the topic to plan another public event. A Forum scheduled for late November, and postponed to January, 2016, invited others to provide their points of view and two architects took on that challenge. I have reviewed what other cities and preservation groups have reported on similar studies and also looked into environmental psychology as a means to understand how non-design professionals perceive the built environment.

This report is presented in the form of draft standards, as that is how we are used to reviewing proposed new construction in historic districts. As my presentations and thinking evolved over the last months, I am proposing support for compatible, as opposed to comparable, design in historic districts for a variety of reasons. These include the fact that our strong and consistent historic district streetscapes can accommodate some buildings that are not comparable; a desire for our historic districts to strongly convey a sense of time and place from the past, but also a sense of vibrancy and authentic change; and a desire to recognize that not all matters of compatibility are visual and that quality of construction and materials – building to last – as well as sustainability and supporting urban forms and goals.

## **Principles for New Construction in St. Louis Historic Districts**

These principles are another means of stating the intent of this approach to compatible new construction in historic districts. They are supported by the more specific standards.

The Preservation Board's review of a proposal has an important role, as it considers the project in the larger district resource and to assess the public's ability to find compatibility in what is proposed.

The district is a resource more important than any of its individual components. It conveys a time and place and also change over time.

Compatibility is not comparability. Compatibility is less similar than comparability yet there are comparisons to consider.

Compatible buildings can – and should – be different from their neighbors in historic districts. They do not have to be replicative or dominantly comparable to be compatible.

The sense of what is appropriate infill construction is very local and therefore varies from district to district, location to location.

Compatibility is often a visual judgement. Compatibility can be achieved in various design approaches, as well as in quality of design and materials and the provision of sustainable, durable, and comfortable buildings suited to modern needs.

Compatibility is an achievable design challenge that allows for creativity and innovation within some parameters.

Minor variations in design are preferable to repetition, as this is the pattern of the existing buildings.

New construction should have integrated construction methods and exterior materials.

The approval of a design in one location does not mean that it will be found compatible in another location. Design should be site specific and avoid standard designs. Variations are preferable to repetition when multiple buildings are proposed.

Materials and color are important interrelated factors in selection and placement and can reinforce coherency or introduce contrast in strong, consistent streetscapes as new buildings provide a sense of a vibrant, authentic urban setting.

#### **Statement of Intent**

The intent of the new construction standards is to provide a means to discuss and assess the compatibility of proposed buildings within the existing character of an historic district. Each historic district is a resource that conveys a particular place and time of the past; its designation indicates that it is a significant resource to protect from demolition and disinvestment. Yet districts are also evidence of change over time as new buildings are constructed in them. The intent of these standards is to carefully consider how new buildings will be complementary new investments that add to, and not detract from, historic districts. The goal for compatible new buildings in St. Louis historic districts is high-quality design and construction that respects nearby historic buildings.

There is more than one approach to design in historic districts within the overall concept of compatibility. There is a difference between compatibility and comparability, which is a much more restrictive comparison that relies on similarity in concept and details. Some comparability – particularly in scale and placement – provides compatibility for new construction within a historic district streetscape. New buildings do not need to be in a replica historic design to be compatible; new buildings with a similar degree of scale and architectural detail can be compatible and in no way diminish nearby historic buildings. Buildings that provide these qualities can be complementary as compatibility implies variety within some overall unity. A new building in an historic district should be an expression of the design and construction of the time of development, but have a readily discernable compatibility with forms and patterns of buildings in historic districts.

**Visual Compatibility**. The characters of the City's historic districts, which are predominately residential, are that of quite homogeneous neighborhoods with consistent use of materials and colors. For this reason many feel that a proposed new building must pass a "visual compatibility" test within its immediate setting derived from several factors, including materials, design articulation, and scale. Visual compatibility should be readily perceived and not need to be explained.

Reinvention and Reference. Compatible new design that avoids replication of traditional building types and styles can nevertheless sustain a sense of continuity over time, particularly when designs can be perceived to reinterpret historic building types and styles or make clear references to them, or use the same materials. An abstraction, however, should pass a "first glance test" for recognition and of the reference and compatibility within the historic district. The design of a new building can maintain a balance between a differentiation from historic buildings and comparability with them, having both of these characteristics readily perceivable. This approach to the design of new buildings respects the existing context and uses its underlying principles of spatial relationships, composition, scale of parts to the whole, ratio of solids and voids, and extent of ornament.

**Contrast**. For others, the consistency in our historic districts provides the opportunity for new buildings that are more of a punctuation point in the streetscape and introduce contrast and juxtaposition. When a use requires, or preference is the reason for a departure from historic patterns, broader considerations of compatibility can be considered.

**Traditions in Building in St. Louis.** Many views of compatible new construction extend the tradition of the provision of high-quality, well-designed, sustainable buildings in St. Louis. These are among the reasons the buildings in historic districts remain in use and are significant assets of the City. High-quality design can be a means of affording compatibility. Enabling a sense of dynamic urban life and authenticity in a city, including in historic districts where we are choosing to take historic buildings into the future, are parallel goals.

Form, Articulation and Materials. The popularity of form-based zoning in many cities and the recent adoption of that approach in St. Louis highlights the desirability of standard patterns in various neighborhoods that include scale and orientation, alignment, and location of garages, as well as the form and articulation of buildings. The form-based zoning approach to the regulation of new construction also identifies exterior materials that cannot be used on the premise that new buildings must be of a similar quality. In a similar manner, these standards allow for the use of many materials and recommend the use of those that convey their inherent qualities and do not imitate other materials.

These standards acknowledge that what is compatible is hard to articulate once comparability is not a primary consideration. These standards acknowledge new construction may not appear to have a neutral effect in a streetscape if comparability is not required. These standards also acknowledge that different sites warrant different approaches to design.

This table summarizes some approaches to design and types of projects and illustrates why no one approach to design will be articulated in these standards.

Design Approaches for Additions and New Construction: Recommendations			
Design Approache	Highly Visible	New Construction	New Construction
Approach	Additions	Small of Infill project	Large project
Use historic			
vocabulary or			
replicate historic	Possible but not	Possible but not	
design	necessary	necessary	Not recommended
Reinvention			
within a type or			
style	Recommended	Recommended	Recommended
Abstract			
reference to the			
historic	Depends on scale	Possible	Recommended
	Possible; may be	Possible; may be	Possible; justified in areas of
Contrast/	justified by use	justified use and	extensive loss and by use
Juxtaposition	and urban goals	urban goals	and urban goals
Introduce new			
property types or			
urban uses		Possible	Possible

# **Compatible New Construction Standards**

#### General

New buildings shall be sufficiently similar in some of the aspects of size, scale, height, location on the lot, materials or colors to convey a design relationship in the context of nearby historic buildings in the district, sub-area or block.

Designers shall present new construction in terms of the overall approach to design and features that establish compatibility.

A compatible design approved for one location does not mean that it will be found compatible in another. Designs shall be site specific and avoid standard or formulaic solutions. Variations are preferable to repetition when multiple buildings are proposed.

#### Height

Compatibility in height does not necessarily mean the same height.

Non-residential uses and locations on thoroughfares provide reasons for a taller height that is compatible.

As one-story buildings in general do not provide the density and urban character of the historic districts, they are not considered to be compatible in height, but may be justified by use, such as a school or accessible housing.

It is more important that a single infill building be comparable in height to its flanking historic ones than a larger project.

#### Massing

For additions and infill housing, the massing of the building shall be readily perceived to have some relationship to the buildings in the historic district. This relationship could be massing utilizing a rectangular footprint and similar ratios of width to height of existing buildings, similar complexity or simplicity, or some other factor.

Distinctly atypical or excessively varied massing for the sake of variety is not considered to support the desired compatibility of massing.

#### **Setback and Blockface**

The blockface maintained by the setback of buildings shall not be diluted by the placement of new buildings. If there is a consistent setback, the primary mass of new buildings shall be at the setback line.

A single infill building that is flanked by historic ones shall maintain the setback line of one or both of those buildings.

A single infill building shall be positioned to maintain the common distance between buildings on the blockface on one side and therefore may not be centered on the lot.

Site plans that introduce suburban forms of development, including but not limited to new streets forming cul-de-sacs with buildings facing them or individual driveways leading to front garages, shall not be introduced into a district.

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#### **Street-facing Façade Composition**

A street façade shall incorporate architectural elements that have a human scale and reflect interior and exterior patterns of use or ownership. If it is a screen of some type, access to the building shall be visible from the street.

A street façade shall have a ratio of solids to voids – walls to windows – that is comparable to nearby buildings or those of the same type in the district.

The design of a street façade shall use window and door placement, as well as vertical plane breaks, to avoid large expanses of solid walls.

A street façade shall not include garage doors in residential buildings.

### Materials on Visible Façades

A street façade shall have one primary or dominant material on the façade.

The primary façade material shall be compatible in material or color to the prominent visual character of its blockfront setting or have some other justification for its use.

Compatibility in color may be achieved through the use of another color that is similar in value. The inherent colors of visible non-façade materials shall be of similar value to those of the façade and shall introduce no more than two additional colors. Color may also be introduced through small scale features.

Exterior insulated finish systems (EIFS) and vinyl siding are not allowed on portions of buildings visible from streets in the historic district as they are sufficiently different in appearance and quality as to detract from the historic buildings.

Primary and secondary façade materials shall be combined with constructional logic, which includes, but is not limited to, not placing masonry materials above wood or other lighter materials

A building may not have a street façade of one primary material, and three walls of another material, unless the façade material returns a substantial distance on the side elevations and terminates at a logical point, such as a vertical plane break or rear wing. Changes of materials shall relate to the articulation of the building with vertical or horizontal plane breaks and reflect interior and exterior patterns of use or ownership.

Materials for visible roofs of the main block of a building shall be a single material and color.

#### Windows and Doors

Window and door openings shall relate to interior and exterior patterns of use or ownership.

The street façade shall have window openings that meet the mandate to have a comparable ratio of solids and voids.

The main entrance shall be placed in the street façade or on a side façade near the front of the property.

#### **Solar Panels**

The use of visible solar panels or similar materials such as solar shingles may integrate the panels or shingles into the overall design, i.e. as shade devices or awnings or be integral to and cover the entire roof.

Solar panels may be installed if they meet the requirements for visual compatibility in the Solar Panel Installation Policy adopted by the Preservation Board.

#### Recommendation

I propose that the Preservation Board consider the adoption of a Compatible New Construction Policy. City Ordinance #64689 states that the Preservation Board shall be responsible for policy with respect to historic preservation in the City, and for establishing and articulating standards with respect to the minimum exterior appearance of improvements within Historic Districts in such a manner as to enhance property in the City, encourage property maintenance and promote development consistent with the City's Comprehensive Plan. A policy that supports compatible new construction is within this mandate.

A Compatible New Construction Policy would be similar to the Solar Panel Installation Policy in that it would be used where it would not be in conflict with existing historic district standards. In this case, the policy is intended to be used with existing standards in the assessment of the compatibility in the City's historic districts when the standards do not require new buildings to be based on a Historic Model Example. **As a policy, it would not replace any new construction standards adopted by Ordinance**. As an articulation of what is compatible – as opposed to comparable – the policy would provide a vocabulary to use when discussing proposals, particularly when district standards for new construction are not as extensive as they might be. It would also send a message to developers that compatible new construction will be considered within an agreed-upon framework in some districts.

A policy, as opposed to standards adopted by ordinance, can be assessed for effectiveness and completeness and be revised as needed. The Preservation Board can discontinue the use of the policy or alter it relatively easily. If the standards in the policy prove to be effective, the text could be incorporated into revisions of historic district standards.

#### **Definitions**

**Abstract Reference.** The abstract reference design strategy makes reference to an historic building form or style, while avoiding literal resemblance. This approach emphasizes differentiation over comparability, yet can achieve compatibility.

**Comparable.** As used in this document, an adjective that describes entities that are quite similar, or equivalent, based on physical qualities.

**Compatible new construction.** This term describes new buildings that are sufficiently similar to nearby existing ones in *some* of the aspects of size, scale, height, location on the lot, materials or colors to convey a design relationship.

**Contrast or Juxtaposition.** This approach to design introduces new elements into a streetscape in a historic district, often through forms, materials, and colors.

**Form-based zoning.** This is a type of land development regulation that specifies physical forms and uses and often includes areas of types of development, building types and architectural standards. The intent of form-based zoning, similar to that of historic district standards, is to foster predictable changes in the built environment.

**Historic Model Example.** A building or element(s) of a single example of architectural type and style used as the basis of a the design of a reconstructed element or new building.

Invention within a Building Type or Style. This approach to design avoids replication of traditional building types and styles yet sustains a sense of continuity in architectural language and perhaps in the use of materials. This is achieved often by reinterpreting building elements within a familiar frame of reference. A design of this type maintains a balance between differentiation from historic buildings and compatibility with them and both of these characteristics are readily perceivable. This approach to the design of new buildings respects the existing context and uses its underlying principles of space, composition, scale of parts to the whole, ratio of solids and voids, and the extent of ornament.

**Visible.** A condition wherein something can be seen when viewed from six feet or less above street grade from the street or sidewalk. This is a condition that can be verified, rather than a judgment about the effects of the visibility. Elements such as opaque fences and landscaping that are not permanent do not eliminate visibility, but are taken into account.

**Visual Compatibility**. This term qualifies the effect of visibility. It is achieved when the element or object to be considered is designed and placed to have clear relationships with its setting.